

OZONE LAYER DESTRUCTION: PROBLEM SOLUTION**A.S. Seydalieva**Scientific advisor associate professor I.A. Matveenko
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The World Ocean plays an important part in existence biological envelope on the Earth; it also determines solar energy's transformations, which give rise to living form of our planet. The World Ocean regulates the content of oxygen and carbon dioxide in atmosphere[1]. A vast number of contaminants enter into the World Ocean as a result of human activity, for example, releasing manufacturing and consumer waste into water reservoirs, dumping toxic waste or radio waste, disturbances at factories, continental off-flow, boat traffic, non-renewal exploitation, etc [4].

Rate of contaminants' arrival into World Ocean is constantly increasing exponentially. Unfortunately, it happens not only at the region levels, but also in the Ocean in general. As a result, there are some changes in concentrations of most chemical compounds in the Ocean.

However, not all of substances, released into the World Ocean in the form of waste, are dangerous for its environment. Sea water contains a large number of chemical elements; it is a reason to mention that sea water is a universally applicable solvent. So, what component can we call poisonous for World Ocean? If amount of substance is more than its flowrate and content of definite component influences all ecosystems or their parts, this substance is called dangerous for the Ocean [5].

It was revealed that there are some limits in The World Ocean water pollution. The reason is the wrong old diffused theory consisting of the idea that sea water has an absolute capacity for self-purification. A lot of people believed that all kind of waste irrespective of its quantity would be solved in water, hence, the World Ocean water would not be poisoned with any substances. As a result, the World Ocean has become just a big "natural drain damp" [1].

Oil pollution is one of the most dangerous pollutions nowadays. About 6 – 15 million tons of oil are spilled into the World Ocean every year. Oil can be spilled into water while transporting it by oil tankers. After transportation these ships need to have a balance on water, they have to fill in some parts of these ships with water. This used water is then discharged into the Ocean with the remained oil [3].

One of the most common types of the World Oceans pollution is pollution with manufacturing and consumer waste. One can say that all economically developed countries are responsible for this challenge, because a lot of big factories use rivers, lakes, seas for dumping. Cellulose and paper factories have an extremely negative effect on the World Oceans environment.

Detergents are synthetic cleaning chemicals used in human everyday life. Their production is constantly increasing. These substances form a lot of foam released into water. Detergents do not lose their foam formation even after going through different cleansing structures, so water bodies, which contain these substances, are covered with huge puff of foam. Detergents are very toxic and low-biodegradable, they are not removed by cleaning and does not solve.

Agricultural effluents are a kind of water pollution connected with pesticides using for rat and insect destruction. It is very dangerous for the Ocean too[2].

Some heavy metals, such as mercury and cadmium, often involved in manufactory wastes influence not only sea ecology but also people's health.

The rate of the World Ocean pollution with consumer commodities such as tins, beer bottles, and plastic bags is increasing. Until recently it was difficult for ships to harbor in Barcelona, Marseilles, Genoa, Naples, because water face was covered with rubbish, plastic bottles, and tires.

In 1969 Thor Heyerdahl, a famous Norwegian traveler, while in sea traveling, recognized that Atlantic Ocean is very polluted by overall consumption things. It was calculated that only in the North part of Ocean there was 35 million of plastic bottles. Each human has ever left his rubbish in forests, streets or river [3].

We can see human ecological footprint even in the deepest places in the World Ocean. Once in Puerto Rico trench the Soviet research ship trawls founded tin cans, polyethene ribbons, and latten bolts.

Problem of the World Ocean pollution is very important nowadays. A lot of world famous scientists are trying to solve this problem, people have just started to understand that we depend on the Ocean, and mankind has to save it.

Unfortunately, scientists from all over the world cannot sort out all chemicals and radioactive pollutants despite the contemporary engineering equipment [3].

References

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ASSESSMENT OF MERCURY LOAD PARAMETERS OF SOLID SNOW PRECIPITATION IN OMSK AREA ACCORDING TO THE ATMOSGEOCHEMICAL SURVEY

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Nowadays a lot of toxic pollutants in the air come from anthropogenic sources. Also, some toxic substances are released into the atmosphere from natural sources. It may be volcanoes or forest fires. However, cities are the most concentrated form of anthropogenic impact on the environment.

Atmospheric aerosols containing mercury produce harmful effect on the health of the urban population, and during precipitation and accumulation in the snow cover they become a source of pollution of neighboring components of the environment - soil, surface water and others. As it was found out in previous global mercury assessments, the main industrial sources of atmospheric mercury are coal burning, mining, industrial activities that produce various metals or process other raw materials to produce cement. In these activities, mercury is emitted because it is present as an impurity in fuels and raw materials. Here, mercury emissions and releases are sometimes referred to as 'by-product' or 'unintentional' emissions or releases. Therefore, the evaluation of airborne releases of mercury from atmospheric deposition is relevant to many urban areas. [10]